

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau

553584

(43) International Publication Date
4 November 2004 (04.11.2004)

PCT

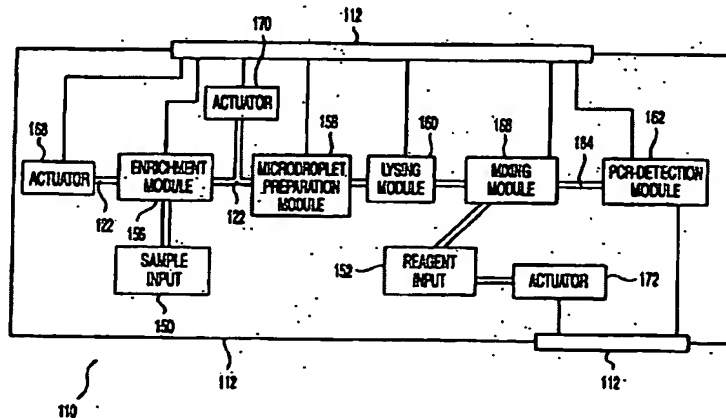
(10) International Publication Number
WO 2004/094986 A2

- (51) International Patent Classification⁷: G01N
- (21) International Application Number:
PCT/US2004/011900
- (22) International Filing Date: 16 April 2004 (16.04.2004)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
60/463,047 16 April 2003 (16.04.2003) US
- (63) Related by continuation (CON) or continuation-in-part (CIP) to earlier application:
US 60/463,047 (CON)
Filed on 16 April 2003 (16.04.2003)
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- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US (patent), UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, SD, SI, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK,

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(54) Title: SYSTEM AND METHOD FOR ELECTROCHEMICAL DETECTION OF BIOLOGICAL COMPOUNDS



(57) Abstract: The present invention relates to an electrochemical method for detecting a target polynucleotide. An electrode comprising an electrode surface is provided. The electrode surface includes at least one probe molecule reversibly immobilized with respect to the electrode surface. A first electrochemical signal indicative of an amount of probe molecule immobilized with respect to the electrode surface is obtained. The electrode surface is contacted with a liquid comprising the target polynucleotide. Upon the contacting step, at least some of the probe molecule immobilized with respect to the electrode surface dissociates therefrom. A second electrochemical signal indicative of an amount of probe molecule immobilized with respect to the electrode surface is obtained. The presence of the target polynucleotide is determined at least partially on the basis of the first and second electrochemical signals.